

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: BERGMANN et al. Attorney Docket No.: 2582.009  
 Serial No.: 10/536,577 Examiner: Unknown  
 Filed: May 26, 2005 Group Art Unit: 1641  
 Title: IDENTIFICATION OF TSH RECEPTOR AUTOANTIBODIES USING  
 AFFINITY-PURIFIED ANTIBODIES

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as first class mail in an envelope addressed to:  
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Kathy Smith Dias  
 Attorney for Applicants  
 Reg. No. 41,707

Date of Signature: July 18, 2006

To: Mail Stop PCT  
 Commissioner for Patents  
 P.O. Box 1450  
 Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Dear Sir:

In accordance with 37 C.F.R. §1.56, Applicants bring to the attention of the Examiner the references listed on the enclosed Information Disclosure Citation (PTO Form 1449). Copies of the references are enclosed herewith.

Inasmuch as the present Information Disclosure Statement is being filed before issuance of a first Office Action, it is respectfully submitted that no official surcharge is required.

Respectfully submitted,



Kathy Smith Dias  
 Attorney for Applicants  
 Reg. No. 41,707

Dated: July 18, 2006

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<b>INFORMATION DISCLOSURE CITATION</b> <i>(USE SEVERAL SHEETS IF NECESSARY)</i>	ATTY DOCKET NO.	SERIAL NO.
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	<b>BERGMANN ET AL.</b>	
	FILING DATE	GROUP
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MAY 26, 2005

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## DOCUMENTS

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1. *What is the primary purpose of the study?*

## U.S. PATENT DOCUMENTS

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION		
							NO	YES	ABSTRACT
	CA	WO 98/26294	06/18/1998						X
	CB	WO 98/20343	05/14/1998						X
	CC	WO 91/09121	06/27/1991					X	
	CD	EP 0 433 509 B1	11/13/1996	Europe				X	
	CE	WO 91/10735	07/25/1991						X

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

	DA	Bryant <i>et al.</i> , "Identification of thyroid blocking antibodies and receptor epitopes in autoimmune hypothyroidism by affinity purification using synthetic TSH receptor peptides," <i>Autoimmunity</i> , 22, pp. 69-79 (1995).
	DB	Nagayama <i>et al.</i> , "Binding Domains of Stimulatory and Inhibitory Thyrotropin (TSH) Receptor Autoantibodies Determined with Chimeric TSH-Lutropin/Chorionic Gonadotropin Receptors," <i>J. of Clinical Investigation</i> , Inc., 88, pp. 336-340 (1991).

EXAMINER: M. H. M. (if a group of 3 or more, list the first 2 names) DATE CONSIDERED: \_\_\_\_\_

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**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

DC	Dallas <i>et al.</i> , "A Region on the Human Thyrotropin Receptor which can Induce Antibodies that Inhibit Thyrotropin-mediated Activation of <i>in vitro</i> Thyroid Cell Function also contains a Highly Immunogenic Epitope," <i>J. of Autoimmunity</i> , 7, pp. 469-483 (1994).
DD	Morgenthaler <i>et al.</i> , "Affinity purification and diagnostic use of TSH receptor autoantibodies from human serum," <i>Molecular and Cellular Endocrinology</i> , 212, pp. 73-79 (2003).
DE	Morris <i>et al.</i> , "Identification of Epitopes and Affinity Purification of Thyroid Stimulating Auto-Antibodies Using Synthetic Human TSH Receptor Peptides," <i>Autoimmunity</i> , 17, pp. 287-299 (1994).
DF	Furmaniak <i>et al.</i> , "The Structure of Thyroid Autoantigens," <i>Autoimmunity</i> , 7, pp. 63-80 (1990).
DG	Lidert <i>et al.</i> , "Cloning, Sequencing and Expression of the Human Thyrotropin (TSH) Receptor Evidence for Binding of Autoantibodies," <i>Biochemical and Biophysical Research Communications</i> , 165(3), pp. 1250-1255 (1989).
DH	Nagayama <i>et al.</i> , "Molecular Cloning, Sequence and Functional Expression of the cDNA for the Human Thyrotropin Receptor," <i>Biochemical and Biophysical Research Communications</i> , 165(3), pp. 1184-1190 (1989).
DI	Nagayama <i>et al.</i> , "The Thyrotropin Receptor 25 Years after Its Discovery: New Insight after Its Molecular Cloning," <i>Molecular Endocrinology</i> , 6(2), pp. 145-156 (1992).
DJ	Costagliola <i>et al.</i> , "Second Generation Assay for Thyrotropin Receptor Antibodies Has Superior Diagnostic Sensitivity for Graves' Disease," <i>J. of Clinical Endocrinology and Metabolism</i> , 84(1), pp. 90-97 (1999).
DK	Costagliola <i>et al.</i> , "Production of monoclonal antibodies recognizing the native human TSHR and induction of thyroiditis in Balb/c mice, by genetic immunization," <i>J. Endocrinol. Invest.</i> 20 (Suppl. to no. 5) (1997).
DL	Costagliola <i>et al.</i> , "Genetic Immunization Against the Human Thyrotropin Receptor Causes Thyroiditis and Allows Production of Monoclonal Antibodies Recognizing the Native Receptor <sup>1</sup> ," <i>J. of Immunology</i> , 160, pp. 1458-1465 (1998).
DM	Ochi <i>et al.</i> , "Anti-TSH antibodies in Graves' disease and their failure to interact with TSH receptor antibodies," <i>Acta Endocrinologica (Copenh)</i> 120, pp. 773-777 (1989).
DN	Sakata <i>et al.</i> , "Anti-bovine thyrotropin autoantibodies in patients with Hashimoto's thyroiditis, subacute thyroiditis, and systemic lupus erythematosus," <i>J. Endocrinol. Invest.</i> , 14, pp. 123-130 (1991).

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DO	Inui <i>et al.</i> , "Precise Determination of TSH Receptor Antibody Activity in Serum Containing Bovine TSH (bTSH) Binding Antibody by Absorption Using Denatured bTSH or Sheep FSH," <i>Thyroid</i> , 6(4), pp. 295-299 (1996).
DP	Brown <i>et al.</i> , "Partial Purification and Characterization of Thyrotropin Binding Inhibitory Immunoglobulins from Normal Human Plasma," <i>J. of Clinical Endocrinology and Metabolism</i> , 56(1), pp. 156-163 (1983).

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